

FIG. 1 (PRIOR ART)

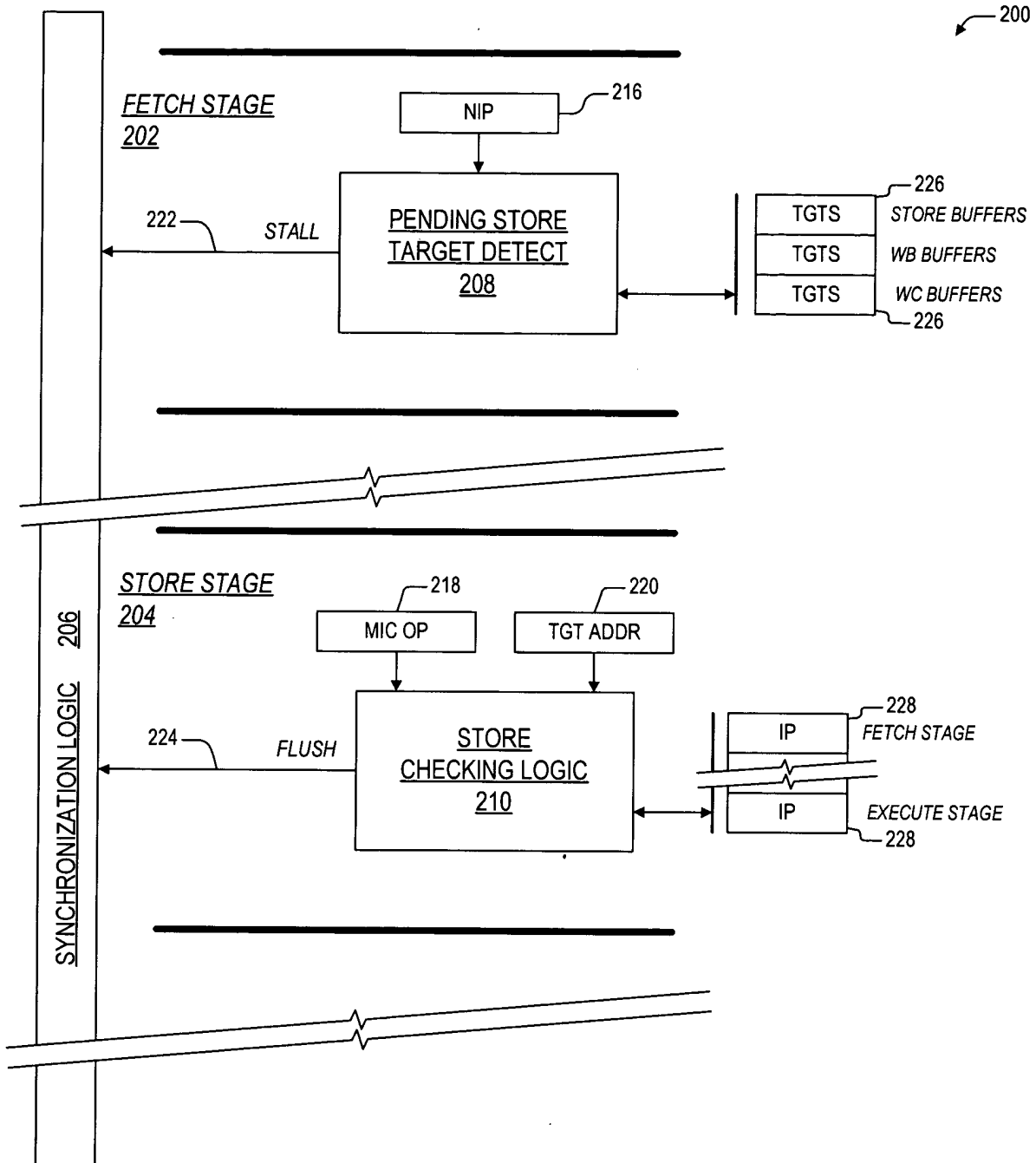


FIG. 2

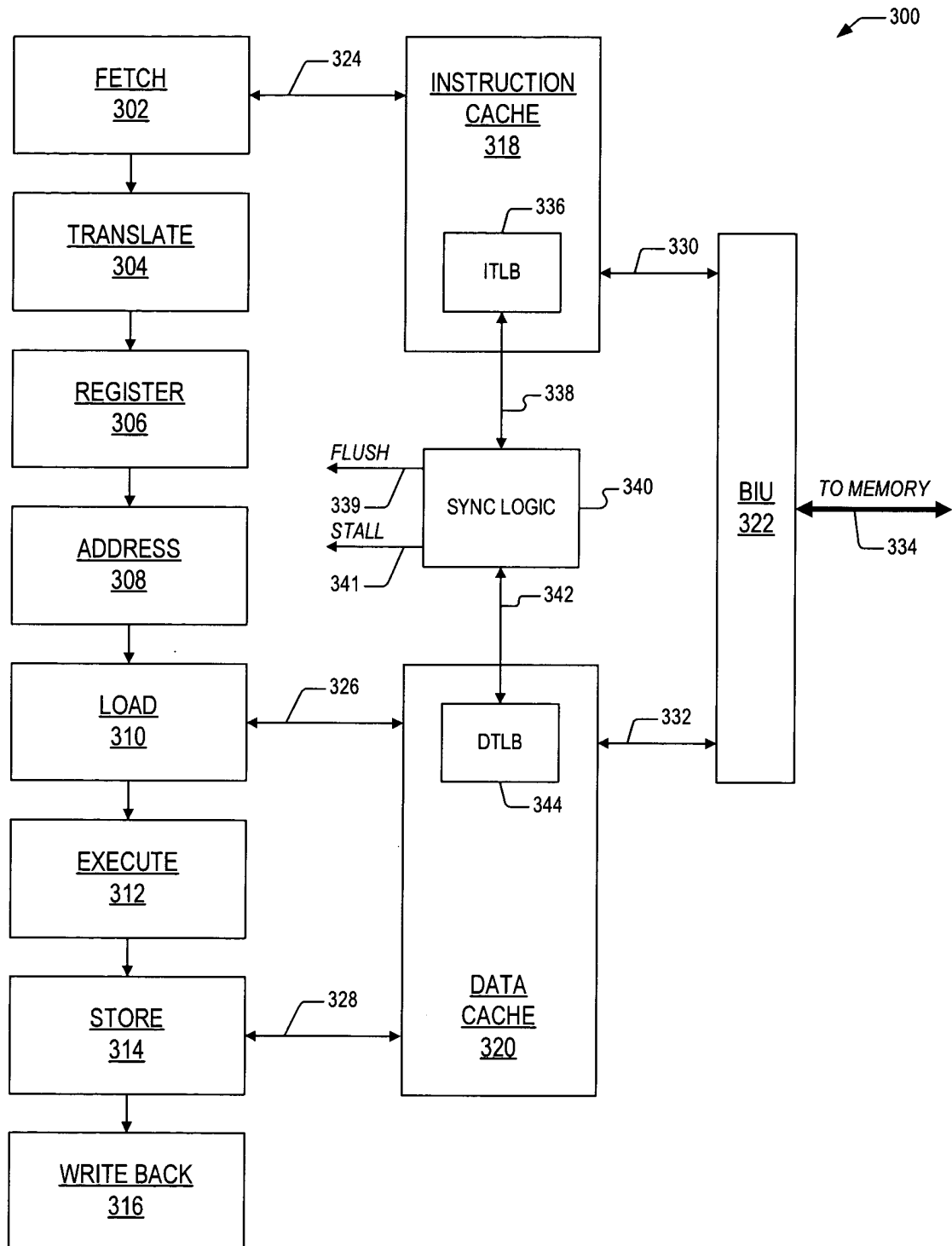


FIG. 3

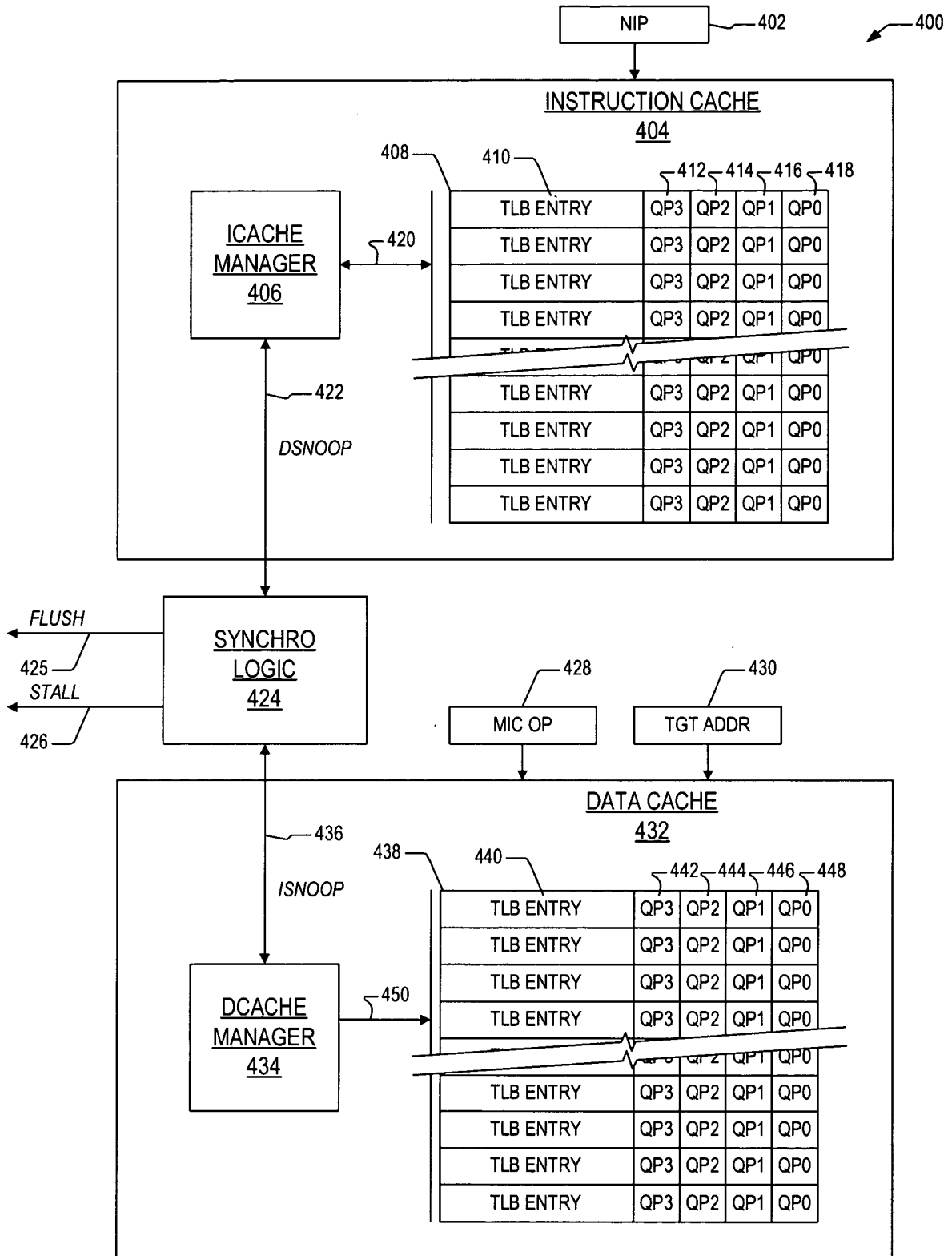


FIG. 4

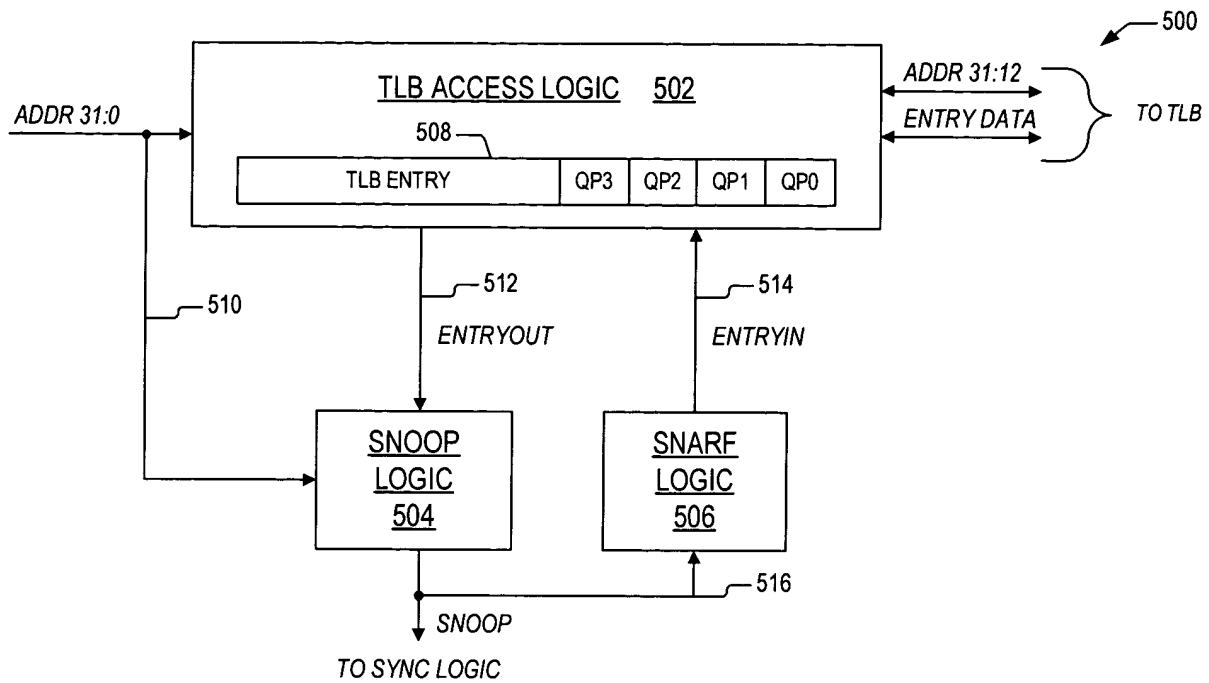


FIG. 5

DTLB HIT ?	OWN QTR PAGE ?	SYNCRO ACTION
YES	YES	COMPLETE STORE.
YES	NO	I SNOOP. ON SNOOP HIT WITH OWNERSHIP, KILL OWNERSHIP, FLUSH PIPELINE, AND COMPLETE STORE. OTHERWISE, COMPLETE STORE.
NO	DON'T CARE	I SNOOP. ON SNOOP HIT, COPY ENTRY FROM ITLB. IF ITLB HAS OWNERSHIP, KILL OWNERSHIP, FLUSH PIPELINE, AND COMPLETE STORE. OTHERWISE, COMPLETE STORE.

FIG. 6

ITLB HIT ?	OWN QTR PAGE ?	SYNCRO ACTION
YES	YES	COMPLETE FETCH.
YES	NO	D SNOOP. ON SNOOP HIT WITH OWNERSHIP, STALL UNTIL PIPELINE IS IDLE, KILL OWNERSHIP, COMPLETE FETCH. OTHERWISE, COMPLETE FETCH.
NO	DON'T CARE	D SNOOP. ON SNOOP HIT, COPY ENTRY FROM DTLB. IF DTLB HAS OWNERSHIP, STALL UNTIL PIPELINE IS IDLE, KILL OWNERSHIP, COMPLETE FETCH. OTHERWISE, COMPLETE FETCH.

FIG. 7

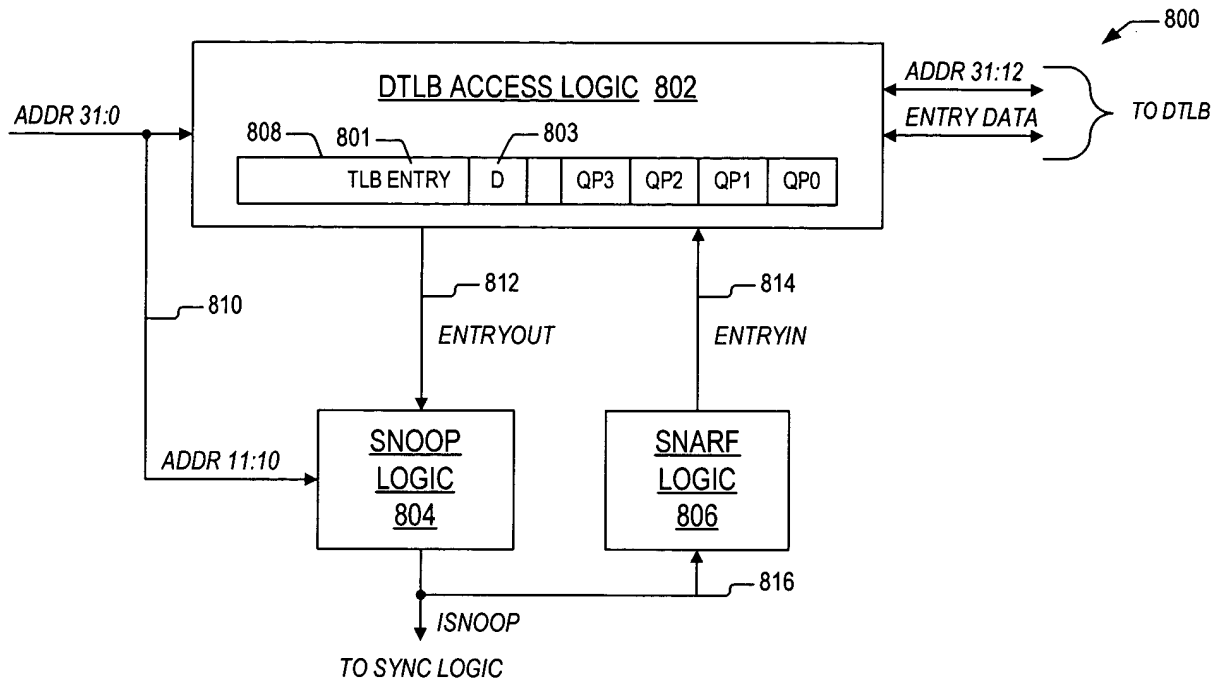


FIG. 8



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DTLB HIT ?	OWN QTR PAGE ?	DIRTY?	SYNCRO ACTION
YES	YES	YES	COMPLETE STORE.
YES	YES	NO	I SNOOP. ON SNOOP HIT WITH OWNERSHIP, KILL OWNERSHIP, FLUSH PIPELINE, AND COMPLETE STORE. OTHERWISE, COMPLETE STORE.
YES	NO	X	I SNOOP. ON SNOOP HIT WITH OWNERSHIP, KILL OWNERSHIP, FLUSH PIPELINE, AND COMPLETE STORE. OTHERWISE, COMPLETE STORE.
NO	DON'T CARE	NO	I SNOOP. ON SNOOP HIT, COPY ENTRY FROM ITLB. IF ITLB HAS OWNERSHIP, KILL OWNERSHIP, FLUSH PIPELINE, AND COMPLETE STORE. OTHERWISE, COMPLETE STORE.

FIG. 9

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ITLB HIT ?	OWN QTR PAGE ?	SYNCRO ACTION
YES	YES	COMPLETE FETCH.
YES	NO	D SNOOP. ON SNOOP HIT WITH DIRTY, KILL OWNERSHIP, STALL UNTIL PIPELINE IS IDLE, THEN COMPLETE FETCH. OTHERWISE, COMPLETE FETCH.
NO	DON'T CARE	D SNOOP. ON SNOOP HIT, COPY ENTRY FROM DTLB. IF DTLB ENTRY IS DIRTY, KILL OWNERSHIP, STALL UNTIL PIPELINE IS IDLE, THEN COMPLETE FETCH. OTHERWISE, COMPLETE FETCH.

FIG. 10

